

SAC Table Definitions

The SAC Table was developed by the Science Advisory Committee to describe the threats, sources of threats, severity, resource component affected, potential vital signs, and monitoring protocols for each important resource identified in the National Capital Region. The resources include Air, Water, Invertebrates, Vegetation Communities, Landscape, Wildlife, Geology, and Rare – Threatened & Endangered Species.

Definitions for the fields are as follows:

Thematic Breakout Session: Identifies the Breakout Session working on the topic. Sessions include: Air, Geology, Invertebrates, Landscape, Vegetation Communities, Water (Note that supplemental information is provided by for the Water Session on a separate tab at the bottom of the spreadsheet), and Wildlife. Note that the RTE Session (Rare, Threatened and Endangered Species and Communities) has a separate tab identified at the bottom of the excel spreadsheet.

Resource Component: List all components of Important Resources that need to be addressed separately (e.g., components for Wildlife may include grassland birds, amphibians, mammals, fish, etc.).

Stressor: Stressors reduce the viability of Important Resources by impacting size, condition, and/or landscape context.

Sources: Sources of stress are the causes of the degradation of Important Resources. Stresses may have multiple sources (e.g., nutrient loading resulting from residential/commercial/office development, wastewater treatment and agricultural practices), and a source often causes multiple stresses (e.g., park facilities/operations/maintenance/use leading to habitat fragmentation, sedimentation and toxins/contaminants).

Ecological effects: The ecological responses caused by each Stressor and Source combination.

Severity of the Threat: Each combination of Stressor and Source is a Threat. Rank severity of Threat according to its contribution to the degradation of the Resource Component. Use – High, Moderate, Low, or Unknown.

Vital Signs (Ecological Indicator): Vital signs can be any measurable feature of the environment that provides insights into the state of the ecosystem. The term is synonymous with "ecological indicator".

Desirable characteristics of indicators:

- are sensitive enough to provide an early warning of change
- have low natural variability
- can be accurately and precisely estimated
- have costs of measurement that are not prohibitive
- have monitoring results that can be interpreted and explained
- are low impact to measure
- have measurable results that are repeatable with different personnel

Protocol: Identify standard protocols (if they exist) that can be used to monitor this vital sign.

Overlap: Identifies the Breakout Session that will also address this issue.

